4-2007

Partners, April 2007

Dale Bumpers College of Agricultural, Food, and Life Sciences (University of Arkansas, Fayetteville). Center of Excellence for Poultry Science

Partners Volume 15 no. 1 • April 2007 • The Center of Excellence for Poultry Science

PARTNERS

A newsletter for faculty, staff, students, alumni, donors, industry and friends of the Center of Excellence for Poultry Science at the University of Arkansas

Photo by Fred Miller

Jean-François-Meullenet

Photo submitted

Billy Hargis

Photo by Jeff Erf

Gisela Erf

Tyson endows Chairs/Professorships

FAYETTEVILLE, Ark. - Greg Weidemann, dean of Dale Bumpers College of Agricultural, Food and Life Sciences at the University of Arkansas, announced that Tyson has endowed a new faculty chair and two new professorships.

Weidemann said current faculty members who are nationally recognized in their fields were named to the positions. They are Billy Hargis, holder of the Tyson Chair in Sustainable Poultry Health; Gisela Erf, holder of the Tyson Professorship in Avian Immunology, and Jean-François Meullenet, holder of the Tyson Food Sensory Science Professorship.

Investment returns from the endowments of $1.5 million for the chair and $500,000 for each professorship will be used for the teaching and research programs of each faculty member. The endowments were from a gift announced in June 2005 by Tyson Foods to the university's Campaign for the Twenty-First Century. A total of $1.25 million from the Tyson gift has been designated for the endowed positions, and that amount was matched by the university's matching fund program.

"We are pleased to be able to support the work of these three outstanding scientists. Their work is important to our industry, and will bring benefits to everyone involved in the poultry industry for years to come," said John Tyson, chairman of the board of Tyson Foods.

Walter Bottje, Department of Poultry Science head said, "We are very thankful for the support from the Tyson endowment. Tyson's generosity will strengthen the programs for these faculty members in addition to the programs of the Center of Excellence for Poultry Science as a whole."

Weidemann said Hargis, Erf and Meullenet are also outstanding teachers

ENDOWMENT - continued on page 2

Photo by Karen Estew

HALL OF FAMER -- From left Shirley Denton and Dr. James Denton at the induction ceremony in Atlanta.

Denton inducted into Poultry Hall of Fame

ATLANTA, Ga. - The American Poultry Historical Society (APHS) honored five outstanding individuals by inducting them into the American Poultry Hall of Fame on Jan. 24 in Atlanta.

The APHS bestows this honor on a maximum of five individuals at three-year intervals. A bronze plaque bearing the image of each inductee will be on permanent display in the National Agricultural Library in Beltsville, MD.

James H. Denton, former director of the Center of Excellence for Poultry Science and professor emeritus at the University of Arkansas, worked in poultry and food safety for 36 years. He has served four terms on the USDA National Advisory Committee for Meat and Poultry Inspection, serves as the Secretariat for the National Alliance for Food Safety and Security, is a fellow of the Poultry Science Association, is the chairman of the PSA Foundation board of trustees, and is on the board of directors of the International HACCP Alliance.

UA poultry students take top honors at presentation contest

by Karen Eskew, Communication Specialist

Photo by Karen Eskew

Photo by Karen Eskew

BIG WINNERS IN ATLANTA (left to right top picture) Ashley Swaffar, undergraduate student of Keith Bramwell's; Stacy Higgins and Sheri Layton, both doctoral students of Billy Hargis. These students won top awards in their respective areas during the International Poultry Scientific Forum. Krishna Hamal, (right) doctoral student of Gisela Erf, received the Alltech Student Manuscript Award during the same meeting.

FAYETTEVILLE, Ark. -- Three University of Arkansas poultry science graduate students recently competed and won awards for presentation of their research.

Krishna Hamal, doctoral student of Gisela Erf from Nepal, received the Alltech Student Manuscript Award for his paper on maternal antibody transfer to offspring in broilers during the International Poultry Scientific Forum (IPSF) held in Atlanta in January. This is the third year in a row a University of Arkansas graduate student has received this award.

Stacy Higgins, doctoral student of Billy Hargis, received one of the top awards given for her poster "effect of probiotic treatment of chicks on phagocytosis of *Salmonella* by isolate macrophages" during the poster competition at the IPSF annual meeting.

Sheri Layton, doctoral student of Billy Hargis, received the top award in her category of avian diseases SCAD II for her presentation on an avian influenza vaccine during the presentation competition also held at the IPSF in Atlanta.

One undergraduate student, Ashley Swaffar of Farmington won the first ever undergraduate presentation award for her presentation on external physical characteristics of commercial broiler breeder males and testes weights and volumes in the environment and management section.

Partners *is published for faculty, staff, students, alumni and friends of the Center of Excellence for Poultry Science (CEPS), University of Arkansas Division of Agriculture and Dale Bumpers College of Agricultural, Food and Life Sciences, UA-Fayetteville.*

Please address all correspondence to: Karen Eskew, Department of Poultry Science, POSC 0-114, University of Arkansas, Fayetteville, AR 72701. Phone (479) 575-4952 and Fax (479) 575-8775. Visit us on the web: ***poultryscience.uark.edu.***

CEPS DIRECTOR: Dr. Walter Bottje (wbottje@uark.edu)
PARTNERS EDITOR: Karen Eskew (keskew@uark.edu).
Writer: Karen Eskew and Contributing writers: Dave Edmark and Matt McGowen
Photographers: Karen Eskew and Fred Miller • Graphic Designer: Karen Eskew

Endowments

continued from page 1

and mentors to both undergraduate and graduate students. "They provide our students with the opportunity to study with scientists who are among the best anywhere in their disciplines," he said.

Hargis is a professor of poultry science and director of the J.K. Skeeles Poultry Health Laboratory. His research focus is sustainable poultry health systems, including the use of probiotics and bacteriophage therapy as alternatives to chemicals for control of bacteria that can cause disease in poultry and foodborne illness in humans. Hargis has a Doctor of Philosophy degree and a doctorate in veterinary medicine from the University of Minnesota and is a diplomate of the American College of Poultry Veterinarians. He was a professor of veterinary pathobiology and poultry science at Texas A&M University prior to joining the UA faculty in 2000.

Erf, professor of poultry science, is one of the nation's leading scientists studying the development and function of the immune system in poultry. Her research includes study of the Smyth line chicken, which exhibits a genetic autoimmune condition similar to vitiligo, which causes abnormal skin pigmentation in humans. Her work provides insight into immune function in poultry as well as humans. Erf has bachelor's and master's degrees in animal science from the University of Guelph in Ontario and a doctoral degree in immunology from Cornell University, Ithaca, N.Y.

Meullenet, associate professor of food science and adjunct professor of poultry science, coordinates the Sensory Service Center for product testing provided by the food science department. His research focuses on sensory testing methods and the relationship between consumer acceptance and sensory properties of food. Meullenet has a master's degree in food engineering from the National Superior School of Agronomy and Food Sciences in Nancy, France, and a doctoral degree in food science and technology from the University of Georgia.

Rapid response to Avian Flu threat

Researchers develop portable biosensor that rapidly detects avian influenza.

by Matt McGowen, Science and Research Reporter, University of Arkansas

Photo by Fred Miller

FIGHTING AGAINST DISEASE - Yanbin Li is shown with his rapid detection device in his laboratory. This device may be the key to controlling the spread of avian influenza.

FAYETTEVILLE, Ark. - An interdisciplinary team of researchers led by Yanbin Li, professor of biological engineering in the University of Arkansas Division of Agriculture, has developed a portable biosensor for in-field, rapid screening of avian influenza virus.

The inexpensive device specifically and sensitively detects the avian influenza strain H5N1 from poultry cloacal or tracheal swab samples in less than 30 minutes and could help health officials coordinate a rapid response for the eradication, quarantine and vaccination of animals.

"Rapid detection is the key to controlling the spread of avian influenza," Li said. "Techniques currently used to detect the disease are either time consuming, too expensive or not specific to subtypes of avian influenza viruses. Our device provides robust and reliable results and introduces the concept of real-time detection to facilitate a coordinated and rapid response."

The research team, composed of Li; Billy Hargis, professor of poultry science; Steve Tung, associate professor of mechanical engineering; and Luc Berghman, associate professor of immunology at Texas A&M University, combined their expertise in biosensors, virology, immunology, microfluidics, poultry diseases and micro-electromechanical systems to design, build and evaluate a prototype device that is portable and simple and provides rapid, specific and sensitive detection of avian influenza virus.

The biosensor is a portable instrument designed for field use. It can be operated as a stand-alone instrument or connected to a laptop computer for data acquisition, analysis and control. The researchers are currently pursuing funding for further testing and evaluation. Li said he expects the device to be ready for commercial production in one year. As a commercial product, the biosensor would cost less than $8,000, Li predicted, and testing fees would be less than $10 per sample.

Based on Li's previous research on impedance biosensors to detect Salmonella and E. coli, the new system uses magnetic bio-nanobeads, a specially designed microfluidic biochip and red blood cell complexes to detect the virus. Detection follows a step-by-step process. First, researchers coat the magnetic nanobeads with specific antibodies to separate and concentrate the target virus within a poultry swab sample. Acting as bio-labels, red blood cells are then mixed with the captured virus to form a complex, which is filtered by a specially designed, micro-fluidic biochip. The biochip then delivers the complex to a microelectrode array for measurement. Researchers detect the specific virus by correlating the change in impedance of the complex under high-frequency and alternating currents to the concentration of avian influenza virus in an original sample.

To optimize the research prototype, the research team is currently developing specific monoclonal antibodies to different subtypes of avian influenza viruses. Another UA researcher, Ryan Tian, assistant professor of chemistry, is developing a titanium dioxide nanofiber to modify the microelectrode for a more sensitive impedance signal from the target virus. When Tian's work is completed, the research team will be ready to conduct field tests for the final evaluation of the technology. Working with specific monoclonal antibodies, Li is also collaborating with researchers at China Agricultural University to develop wireless communication, global positioning systems and imaging for the biosensor's application to a rapid response to animal disease networks in China.

Avian influenza virus H5N1 was discovered in the late 1990s. Animal cases have been reported in more than 46 countries, and 12 countries have reported human infection. As of March 12, according to the World Health Organization, 278 people have been infected, and 168 have died since 2003 due to avian influenza. Recently, a draft report of the U.S. government's emergency plan predicts that as many as 200 million Americans could be infected and 200,000 could die within a few months if an avian flu pandemic were to reach the United States.

In the United States, a 2001 and 2002 outbreak of low pathogenic avian influenza, which poses no threat to humans, resulted in the loss of more than 4.5 million chickens and turkeys and is estimated to have cost the poultry industry approximately $125 million. According to a World Bank report, by mid-2005 more than 140 million birds had died or been destroyed worldwide, and losses to the poultry industry are estimated to be more than $10 billion.

The research is supported by the University of Arkansas System's Division of Agriculture, the Division's Center of Excellence for Poultry Science and the Arkansas Biosciences Institute.

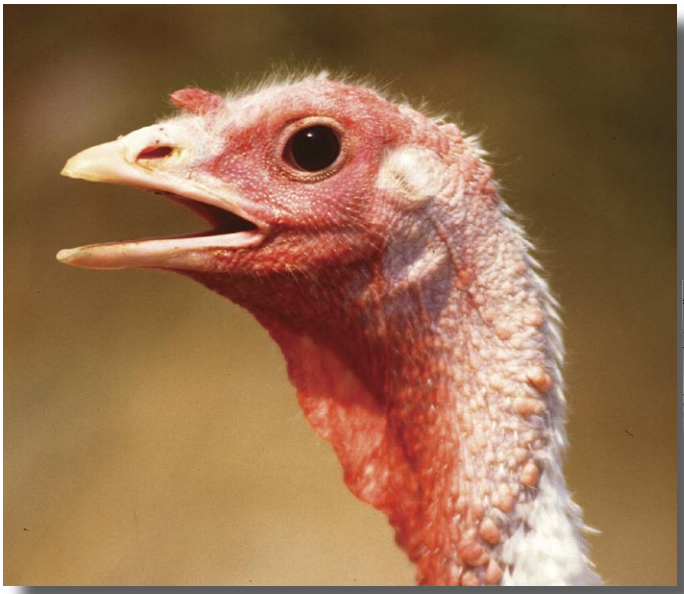

Photo courtesy of USDA ARS image photo gallery

MAKING THINGS BETTER - Dr. Dan Donoghue and fellow researchers at the University of Arkansas are trying to find ways to avoid the potential for antibiotic resistance in turkeys.

Avoiding antibiotic resistance in turkeys

Use bacteriocins instead to kill pathogen

Story by Dave Edmark, Food Safety Consortium

FAYETTEVILLE, Ark. — A University of Arkansas-led research team has found that an effective way to get rid of pathogenic Campylobacter bacteria in turkeys is to use proteins produced naturally by other bacteria. The proteins are called bacteriocins. The researchers found that these proteins can eliminate the detectable Campylobacter and that they can also change conditions in the gut so that the pathogen has fewer places to hide and develop.

"If we can eliminate Campylobacter, we don't have to worry about antibiotic resistance," said Dan Donoghue, a UA Division of Agriculture poultry science researcher who led the project funded by the Food Safety Consortium. The UA group worked with USDA Agricultural Research Service scientists led by Annie Donoghue in Fayetteville, AR, and Norm Stern in Athens, GA., along with several Russian government microbiologists.

Campylobacter, which is one of the leading bacterial causes of foodborne illness, has often been the target of antibiotic treatment in poultry. But that approach has its disadvantages. Donoghue explained that the concern is that the Campylobacter in poultry will become resistant to the antibiotics, and that will lead to human consumers becoming sick.

Antibiotics, however, serve useful purposes to prevent disease or to treat sick birds. So the solution is to eliminate the Campylobacter through other means – in this case, bacteriocins – and then that also eliminates the problems in using antibiotics in poultry for other purposes.

"If there isn't any Campylobacter in poultry, then it can't become drug resistant," Donoghue said. "The use of bacteriocins may allow antibiotics treatment of sick birds without the consequence of antibiotic-resistant Campylobacter."

Although bacteriocins are effective at eliminating detectable levels of Campylobacter, that leads to the question of what about undetectable levels of the pathogen that might still be in the bird's system. Donoghue noted that any possible remaining numbers of the pathogen can recolonize inside the bird within a few days. But if the birds are administered doses of bacteriocins just before processing, then the potential problem goes away.

"By the time the bird would get to the consumer, those numbers of Campylobacter – if they do exist – would be at such a low level that they wouldn't pose a risk to human health," Donoghue said.

Donoghue's project is also exploring the effects that bacteriocins have on the bird's guts. The bacteriocins, after three days of doses, appear to reduce the size of the bird's crypts (narrow but deep pockets in the intestinal wall), which is where Campylobacter is sequestered.

Bill Huff, USDA-ARS faculty member, serves as president during the International Poultry Scientific Forum in Atlanta

ATLANTA, GA. — Scientists at the forefront of poultry science research from around the world met Jan. 21-23 in Atlanta and gave or listened to presentations during the 2007 International Poultry Scientific Forum held at the Georgia World Congress Center.

Bill Huff, faculty member and researcher for the USDA ARS Poultry Production and Product Safety Research Unit housed in the Center of Excellence for Poultry Science served as the president of the Southern Poultry Science Society and helped organize and run this year's meeting.

Officers are elected to serve by the entire membership of the scientific society and serve in several capacities before taking the reigns as the president.

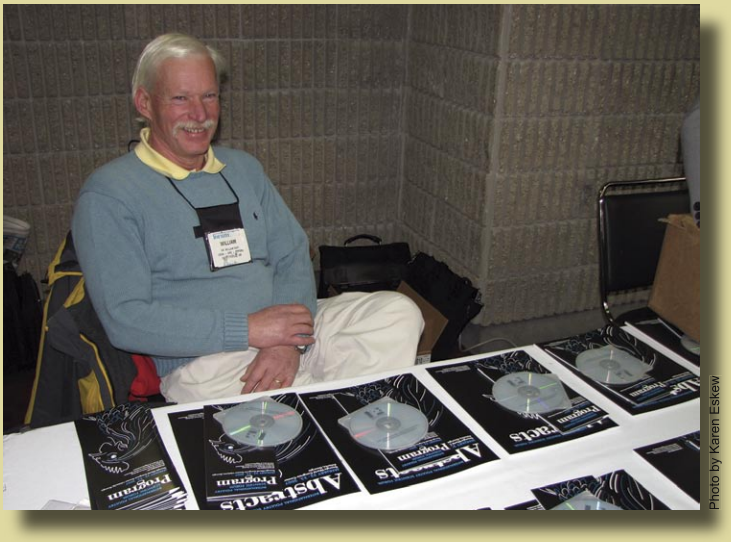

Photo by Karen Eskew

HE'S IN CHARGE - Bill Huff, shown right, takes a break from handing out abstracts to participants during the International Poultry Scientific Forum held in Atlanta in January. Huff served as president during this year's meeting.

Susan Watkins named one of the TOP GUNS in poultry industry

Story by Karen Eskew,
Communication Specialist

TOP GUN IN THE POULTRY INDUSTRY -- Above Susan Watkins is shown next to a mock-up of the cover of the Watt Publishing magazine's November issue where she was named one of 27 top guns in the poultry industry. Watkins is an extension faculty member in the University of Arkansas poultry science department.

FAYETTEVILLE, Ark. — In November 2006, Susan Watkins, extension faculty member in the University of Arkansas Department of Poultry Science was named one of the top 27 problem-solvers in the entire poultry industry by Watt Publishing in their *Poultry USA* magazine.

According to article writers Gary Thornton and Terrence O'Keefe, consultants (and extension specialists such as Watkins) "are an integral part of the poultry business and often are involved in the most crucial decisions at companies."

After the authors contacted personnel at U.S. broiler and turkey companies involved at all levels and phases of operations, they asked the employees to name their most-trusted and respected consultants. The consultants profiled in the article represent a sampling of the high quality of consulting talents available in the industry.

Watkins name was among those that came up again and again, therefore placing her in this prestigious listing.

Out of the 27 consultants profiled in the article, Watkins was one of only three women included.

Watkins is a graduate of the University of Arkansas (undergraduate, master's and doctoral degrees) and joined the Cooperative Extension Service in the Division of Agriculture in 1996.

"When I became an extension specialist, I had to fill the shoes of Dr. Lionel Barton, who was a leading expert in drinking water quality. Many of our clientele assumed I also knew abut water quality and came to me with questions. As a greenhorn specialist, it quickly became apparent that expertise in this area was very limited, so I started digging into water quality issues and have found it to be one of the most dynamic challenges this industry faces," said Watkins.

Poultry Federation announces plans for Spring Symposium

SPRINGDALE - Ark. - The Poultry Federation announces its plans for the 2007 Spring Symposium. Live production personnel and suppliers who support live production of turkeys, breeders, and broilers; and more specifically service technicians and grow-out managers are encouraged to register and attend.

This year's event will be held at the Holiday Inn, Springdale, AR, on April 24 and 25.

A welcome reception is scheduled on Tuesday evening and an impressive lineup of industry speakers is scheduled for all day Wednesday.

Keynote speakers for this year's Symposium during the General Session include John Fitch, newly appointed director of the Arkansas Livestock & Poultry Commission; and Marvin Childers, president and chief lobbyist for The Poultry Federation.

For more information or to register, contact the Federation office at 501-375-8131. Website address is www.thepoultryfederation.com. The Poultry Federation is a three-state trade organization representing the poultry and egg industries in Arkansas, Missouri, and Oklahoma. Offices are located in Little Rock, AR, Jefferson City, MO, and Oklahoma City, OK.

In conjunction with the Spring Symposium, the University of Arkansas Poultry Science Department will host the 8th Annual Poultry Science Scholarship Golf Tournament at Valley View Golf and Country Club in Farmington on Tuesday, April 24th.

There will be two flights and major sponsor of the event is Cobb-Vantress, Inc.

To register or for more information, you may go online to www.poultryscience.uark.edu/golf.html.

International short course on modern poultry production held at UA poultry center

Story by Karen Eskew, Communication Specialist

Photo by Frank Jones

SEEING HOW IT'S DONE -- Marvin Childers, newly-appointed president of The Poultry Federation, checks on watering lines and feed pans in a poultry house on the University of Arkansas campus. Childers was one of the participants in the recent International Short Course on Modern Poultry Production held at the U of A.

FAYETTEVILLE, Ark. -- Frank Jones, organizer of the International Short Course on Modern Poultry Production, recently hosted several participants during the event held at the poultry center on the University of Arkansas campus. The five-day course is held annually in the spring and fall. Participants are provided with a broad understanding of how the modern U.S. poultry industry operates. They also interact with some of the top faculty in the industry as well as participate in hands-on training and field trips to facilities throughout Northwest Arkansas. The next class is scheduled for September and you may receive information about the course by e-mailing Frank Jones at ftjones@uark.edu.

E.L. Stephenson dies

IN MEMORY - Above is a copy of the etching of E.L. Stephenson located in the Pioneer Hall of the UA poultry center atrium.

E.L. Stephenson came to the University of Arkansas in 1949 and worked on reduced feed costs, increased weight gain and improved feed efficiency. Stephenson also focused research on use of antibiotics for poultry and on turkey nutrition. He was department head of the Animal Science Department from 1964 through 1982. Stephenson served as President of the Poultry Science Association, 1973-1974, and was a Fellow of that organization. He was also a member of the American Institute of Nutrition, the Animal Science Association, the World Poultry Science Association and the Society for Experimental Biology and Medicine. He was named Man of the Year by the Arkansas Poultry Federation in 1962-63. Donations in his honor may be made to the E.L. Stephenson poultry science scholarship fund. For information about the E.L. Stephenson scholarship, you may contact Dr. Jason Emmert, scholarship coordinator for the department at jemmert@uark.edu or 479-575-7118.

New president for The Poultry Federation

LITTLE ROCK, Ark. - The Poultry Federation replaced a former state senator with an outgoing state representative to head up their efforts for the poultry and egg industry in Arkansas, Missouri and Oklahoma.

Marvin Childers, an attorney and outgoing state representative for District 77, succeeds Morril Harriman as president of the federation. Childers will act as chief lobbyist for the organization, which represents one of the largest agricultural industries in the state.

Harriman resigned after he accepted the chief-of-staff job for Governor Mike Beebe. He had worked for the federation for six years.

Childers, R-Blytheville, served in he house for six years and practiced law with Friday, Eldridge & Clark law firm of Little rock for nearly seven years.

"We are pleased that Marvin will be serving as president and chief lobbyist for the poultry industry," said Ken Prim, chairman of the federation's board, in a news release announcing the acceptance.

Photo submitted

SPECIAL EMPLOYEE HIGHLIGHT SECTION

The UA Poultry Science Accounting Group

Photo by Karen Eskew

"BEAN COUNTERS" AND OH SO MUCH MORE -- From left Vicki Wyles, Accounting Tech II; Martha Laughlin, Accountant; and Sam Sansom, Accounting Tech II handle a tremendous amount of responsibility by managing all of the accounting for the Department of Poultry Science and the Center of Excellence for Poultry Science.

They "live" on the first floor of the John W. Tyson building, which houses administrative offices for the Center of Excellence for Poultry Science, but their work is far-reaching throughout the department. These three individuals, along with one student worker, Rachel Jones, handle over 250 different state, federal and grant accounts in addition to 85 foundation accounts. Last year Vicki Wyles and Sam Sansom handled over 2300 receiving transactions. The entire budget from grants, gifts and state funds is their responsibility to manage and if there is a discrepancy, these are the individuals who follow through with it until it is resolved. In addition to doing accounts payable and receivable, they also manage 200 P-card transactions per month, all departmental travel by employees, telephones and cell phones, and they have to ensure that all of these transactions meet state requirements. On top of their large workload, the accounting group also handles the departmental inventory, which happens to include the largest equipment list of ANY department on campus. Thank you to the accounting group for all of their effort and detailed work, we are fortunate to have you looking out for us!

"It is our goal to be transparent and seamless and to ensure that the faculty members, researchers and staff can focus on the task at hand and not have to worry with accounting procedures. If we do our job right, then the accounting part of the equation will be nearly invisible and our work will carry on in the background and not get in the way of the important issues, which include research, education, service and extension."

MARTHA LAUGHLIN
Accountant

Grants Awarded

Listed in order of receipt

Philip Moore, Jr. USDA ARS - Fiscal Year 2007 Research Support. $141,515.

Jody Lingbeck and **Steven Ricke***. American Heart Association. Regulation of protein degradation in cardiac and vascular smooth muscle. $39,690. *Ricke is a joint appointment to the Department of Food Science and the Department of Poultry Science.

Susan Watkins. U.S. Poultry and Egg. Research project. $29,500.

Keith Bramwell. Cobb-Vantress, Inc. Effects of incubation temperature on live performance and skeletal development of broilers. $1,800.

This grant list is through January 2007.

Adjunct faculty member Jon Porter dies

RALEIGH, NC. - The Poultry Center lost one our adjunct faculty late in 2006 with the passing of Jon Porter in Mt. Pleasant, Iowa. Porter had been an integral faculty member for HACCP and sanitation workshops conducted at the University of Arkansas, as well as working with John Marcy and James Denton in Arkansas, Argentina and New Zealand.

Porter conducted most of the HACCP training at OK Foods and Townsends of Arkansas. Those of you meeting Porter in the last six years know that he persevered with prostate cancer that had gotten in his bones.

He was a great contributor to our program, not only because of his long history in the sanitation field with Bonewitz, Henkel and Ecolab, but because he was always an educator first.

The Center of Excellence for Poultry Science would like to take a moment to recognize this individual for their contributions to our program, the industry and food safety.

Winners, Again!

FAYETTEVILLE, Ark. - On Jan. 23, the Federal Laboratory Consortium (FLC) announced the 2007 winners of the FLC National Awards for Excellence in Technology Transfer. A group at the U of A poultry center was recognized for novel technology to reduce human foodborne pathogens in poultry. They included faculty members Ann Donoghue, Dan Donoghue, Billy Hargis and Guermillo Tellez. They will receive their award on May 17th.

PARTNERS *in* POULTRY SCIENCE

FACULTY NOTABLES:

Annie Donoghue, **Dan Donoghue, Billy Hargis and Guermillo Tellez** received the 2007 Federal Laboratory Consortium's National Award for Excellence in Technology Transfer for their novel technology to reduce human foodborne pathogens in poultry.

Frank Jones served as host and organizer for the International Short Course on Modern Poultry Production held Feb. 26 - March 2 at the Center of Excellence for Poultry Science.

Billy Hargis and Walter Bottje presented information about portable biosensors (a project by **Yanbin Li**) for rapid screening of avian influenza viruses and a bacterial vectored vaccine for avian influenza at the 2007 Agricultural Science and Education Exhibition/Reception on Capitol Hill held at the Rayburn congressional building Feb. 28th in Washington D.C.

Casey Owens helped host Poultry 101 classes Feb. 26 - March 2 at Texas Tech University in Lubbock in cooperation with Texas Tech faculty member Christine Alvarado and Auburn faculty member Shelly McKee.

Park Waldroup and **H.L. Goodwin, Jr.**, both gave invited presentations for Pew's National Commission on Industrial Farm Animal Production in Fayetteville Feb. 12th. The commission was in town to hear presentations, conduct meetings and take tours of animal agriculture facilities, which **Susan Watkins** helped organize.

Susan Watkins also hosted "Reducing Energy Usage in Poultry Houses" for poultry growers at the Applied Broiler Research Farm in conjunction with Winrock on Dec. 12. Over 100 poultry growers attended the meeting which featured tips on ventilation, electricity and gas savings as well as a demonstration on the AgTite sealant. Watkins was an invited speaker at the following events this spring: The Poultry Federation Spring Symposium, The Arkansas Poultry Veterinary Association meeting, the 3rd Annual Arkansas Women in Agriculture Conference, The Louisiana Poultry Seminar, The Midwest Poultry Federation Convention and The Virginia Poultry Health Seminar

STUDENT NOTABLES:

Krishna Hamal, doctoral student of **Gisela Erf** from Nepal, received the Alltech Student Manuscript Award for his paper on maternal antibody transfer to offspring in broilers during the International Poultry Scientific Forum held in Atlanta in January. This is the third year in a row a University of Arkansas graduate student has received this award.

Stacy Higgins, doctoral student of **Billy Hargis**, received one of the top awards given for her poster "effect of probiotic treatment of chicks on phagocytosis of Salmonella by isolate macrophages" during the poster competition at the International Poultry Scientific Forum held in Atlanta in January.

Sheri Layton, doctoral student of **Billy Hargis**, received the top award in her category of avian diseases SCAD II for her presentation on an avian influenza vaccine during the presentation competition at the International Poultry Scientific Forum held in Atlanta in January.

Ashley Swaffar, a senior poultry science major from Farmington, won the first ever undergraduate research award at the International Poultry Scientific Forum for her presentation during their annual oral and poster contest held in Atlanta in January.

The Poultry Science Club recently elected their new officers for 2007-2008 academic year and they are as follows:

President - Amanda Hancock
Vice President - Samantha Blair
Treasurer - Jessica Reed
Secretary - Brookee Dean
Publicity officers - Darla Hancock and Betsy Conner

The club will host their annual luncheon honoring their seniors and will give out awards to club members and faculty on Friday, April 17th at the poultry center. Award presentations will be covered in the next Partners Newsletter.

Agricultural Experiment Station
110 Agriculture Building
UNIVERSITY OF ARKANSAS
Fayetteville, Arkansas 72701-1201
Publication

Address Service Requested

NON-PROFIT ORGANIZATION
U.S. POSTAGE
PAID
PERMIT NO. 278
FAYETTEVILLE, ARKANSAS